LINK

THE NEWSLETTER OF THE GREAT LAKES REGIONAL POLLUTION PREVENTION ROUNDTABLE

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Change in Leadership

Bob Iverson is the new Executive Director for GLRPPR. Carol Knepp is leaving her position at Illinois Waste Management and Research Center (WMRC) and GLRPPR at the end of the year. She has accepted a position at a children's science museum in Champaign, IL. She will continue to help with GLRPPR projects part-time through December.

"I am looking forward to working with all of the people involved in helping our environment," said Iverson. "I intend to draw from the wealth of knowledge available from the GLRPPR members."

Iverson has been Information Services Program Manager for WMRC since 2000. In that post, Iverson coordinates all the communication and outreach efforts of WMRC. He has managed the GLRPPR program and worked with officials of the other P2Rx Centers. When WMRC served as coordinating agency for P2Rx, Iverson was the director of the department that provided this coordination. He has been active in the coordination of programs, conferences, and Web sites of this federally funded project. Before coming to WMRC, Iverson held positions as Public Relations coordinator for a hospital, news reporter, and assistant to the superintendent of a public school district.

Local WI Leaders Buying into Green Power

More local business leaders are making smart decisions to buy green. Businesses are purchasing green power from the We Energies Energy for Tomorrow renewable energy program.

Why do local business leaders at companies such as Miller Brewing Co., Quad/Graphics Inc. and FedEx Kinko's think buying green is such a smart idea? Reasons most often cited are helping to reduce greenhouse gas emissions, meeting various corporate environmental goals, building strong bonds with the community, and helping to create a more sustainable energy future.

However, large companies aren't the only ones moving to the head of the class in energy management. Small businesses such as Alterra Coffee, Grande Cheese, and Outpost Natural Foods, and educational institutions such as Milwaukee School of Engineering and Milwaukee Area Technical College-Mequon Campus, all purchase renewable energy from Energy for Tomorrow.

Local governments also participate in Energy for Tomorrow. The City of Milwaukee is the newest Energy for Tomorrow customer leading the way in local government participation. Twenty-four percent of the electricity used at City Hall comes from renewable energy.

Over the last three years Energy for Tomorrow experienced a significant increase in business participation. In response to this demand for renewable energy, We Energies expanded the renewable resources used to supply customers by adding solar power and increasing the amount of wind energy used. Solar generation will be added through a unique program called the Solar Buy-Back Rate that purchases electricity generated by Energy for Tomorrow customers with qualifying solar photovoltaic systems. The program now uses 49% wind energy, about 1% solar energy, 8% hydroelectric energy and 42% landfill gas.

In addition to changing the supply mix, the price of renewable energy has been reduced to 1 cent per kilowatt-hour (kWh) for businesses purchasing more than 70,000 kWh per month. With the new rate, Energy for Tomorrow now is one of the most competitive green power utility programs in the country, allowing business customers to substantially increase the amount of renewable energy they purchase with almost no cost increase. This is good for the environment and good for business.

Business owners looking for more information about Energy for Tomorrow or who want to enroll in the program can visit www.we-energies.com/business_new/altenergy/renewable.htm , or call 800-242-9137.

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Coming Soon...Winter 2007 Edition

The LINK winter 2007 article solicitation will be sent to GLRPPR members via e-mail on or about December 1; articles will be due January 8. Send article ideas or questions to Wayne Duke at wduke@wmrc.uiuc.edu.

Wind Turbine for Renewable Hydrogen Production

The 230-foot wind research turbine at the University of Minnesota West Central Research and Outreach Center in Morris is the only large-scale wind research instrument at a public university and provides the foundation for an innovative wind-to-hydrogen project. It will supply 5.6 million kilowatt-hours (kWh) of power each year to the nearby University of Minnesota, Morris campus, supplying over half its annual electricity use. (http://wcroc.coafes.umn.edu/To_Devlop_Globally_Unique_Wind_to_Hydrogen.html)

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Pollution Prevention Support for Multi-media Health Care Inspections

The Minnesota Technical Assistance Program (MnTAP) received funding from U.S. EPA for an 18-month project to integrate pollution prevention into multi-media regulatory inspections. The health care sector was chosen as a pilot due to increased oversight of the industry. Three Minnesota Pollution Control Agency (MPCA) regulatory staff were trained in multiple media: hazardous waste, air, and tanks. They were also provided information about pollution prevention strategies for health care.

A protocol was developed for MPCA regulators to use during inspections: ask relevant pollution prevention questions, complete a brief checklist, hand out relevant MnTAP fact sheets, and refer health care facilities to Catherine Zimmer, MnTAP health care specialist, for follow up.

During the first year of the grant, 21 of the expected 45 multi-media pollution prevention inspections were conducted in Greater Minnesota—the area outside of the seven county Minneapolis/St. Paul region. Results are shown in the table below.

ACTIVITIES YEAR 1	RESULTS
Hospitals inspected by using multi-media protocol	21
Follow up data received by MnTAP	17
MnTAP phone calls (to offer or request assistance)	30
MnTAP pollution prevention assessments	5
Facilities implementing pollution prevention suggestions	5
Waste prevented	275 lb7,553 grams mercury
Cost savings	$43,200

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Laboratory Outreach

MnTAP conducted outreach to 179 Minnesota laboratories, focusing on environmental and health care labs. Contacts were developed using the Minnesota Department of Health Web listing for environmental laboratories as well as our client management database. Educational labs were excluded, as MnTAP does not have the resources to serve this area. A letter introduced MnTAP and referenced our online resources for labs (http://www.mntap.umn.edu/labs). We enclosed a copy of the latest issue of MnTAP's Source newsletter featuring information on laboratory pollution prevention (http://www.mntap.umn.edu/source). Check out the lead article for links to video clips of the experiments of Muppets Dr. Bunsen Honeydew and his assistant Beaker.

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Green Lodging Michigan Program Certifies First Six Facilities

The Michigan Energy Office introduced its new Green Lodging Michigan program at the October 18 meeting of the Michigan Society of Government Meeting Professionals. Green Lodging Michigan (GLM) is a joint effort by the Michigan Energy Office (DLEG) and the Michigan Department of Environmental Quality (DEQ) to encourage the lodging industry to conserve and protect the state's natural resources while increasing marketability and lowering utility costs. The program is a voluntary, non-regulatory effort established to provide certification and assistance to lodging facilities that make special efforts to protect the environment and conserve natural resources.

Hotels and motels that implement "green" practices have also found that they can save money and generate good publicity. Environmental tourism has grown exponentially over the past 10 years. A survey of U.S. travelers found that 87 percent would be more likely to stay at "green" properties. There are 43 million people in the U.S. who are self-proclaimed "eco-tourists."

Facilities are certified at different levels based on meeting basic requirements and a number of additional environmental initiatives. The environmental initiatives are in seven categories: communication and education, energy efficiency, air quality, solid waste reduction, toxic and hazardous waste, water conservation, and purchasing.

There are three levels of certification that can be earned: Partner, Steward and Leader. The first six facilities that have earned Green Lodging Michigan certification include two partners: Bayshore Resort, which is located on the sandy beaches of West Grand Traverse Bay, and the Wren's Nest, a bed and breakfast located in West Bloomfield. The next highest level of certification is Steward. Four have earned Steward certification: Crystal Mountain, located in picturesque northwest lower Michigan, Livonia Marriott, located just outside of Detroit, the 100 year old Neahtawanta Inn, a bed and breakfast located on the Old Mission Peninsula in Grant Traverse Bay, and the Dept. of Natural Resources' Ralph A. MacMullan Conference Center, located on the northern shores of Higgins Lake. As facilities are certified, they will be added to the GLM Web site at www.michigan.gov/greenlodging. Think Green when you travel!

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2007 National Environmental Health & Safety Conference

An exciting and informative program is being developed for the 2007 National Environmental Health & Safety (NEHS) Conference for the Graphic Communications Industries. The event will be held at the Omni Jacksonville Hotel in Jacksonville, FL on March 12-14, 2007.

Paul Jakubski, director, environmental & safety for Dow Jones & Company, will be the conference moderator. Dow Jones & Company is the publisher of The Wall Street Journal. Founded in 1889, it is the world's leading business publication and has a current circulation of nearly 2.1 million. Mr. Jakubski's department is responsible for developing environmental, safety and energy management guidelines, procedures, and policies for the company's 17 Wall Street Journal/Barron's printing plants and 15 daily/18 weekly Ottaway community newspapers, along with numerous office locations.

Breakout sessions will include postpress ergonomics, how to respond to investigations, avoiding fatalities, EHS & HR issues when buying and selling companies, air permit issues, impact of international regulations, and little known facts about hazardous communications.

Building on last year's success, the number of information-sharing roundtables will be expanded and include discussions about responding to customer certification, safety training tips, privacy issues in the workplace, spill prevention control & countermeasure, community relations, and selling safety initiatives to management.

Additional training sessions will include an introduction to the Occupational Safety & Health Administration (OSHA), calculating volatile organic compound (VOC) emissions, and the OSHA 10-hr general industry standards training.

The NEHS Conference is a collaboration of conference partners Foundation of Flexographic Technical Association (FFTA), Specialty Graphic Imaging Association (SGIA), Printing Industries of America/Graphic Arts Technical Foundation (PIA/GATF) and National Association of Printing Ink Manufacturers (NAPIM), along with sponsoring associations, Gravure Association of America (GAA) and Newspaper Association of America (NAA).

MARK YOUR CALENDARS!!

The 2007 Spring GLRPPR Meeting will be held in Chicago, Illinois at the Metcalfe Federal Building on March 13 and 14. For meeting updates, visit http://www.glrppr.org/meetings/Fall2006/.

For more information about the NEHS Conference, visit www.nehsconference.org or contact Doreen M. Monteleone at dmonteleone@flexography.org or 631-737-6020.

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Illinois Organizations Receive Governor's Pollution Prevention Awards

Governor Rod R. Blagojevich and the Illinois Department of Natural Resources (IDNR) have named 24 Illinois companies and organizations 2006 Governor's Pollution Prevention Awards winners for their significant achievements in protecting the environment and boosting the economy. The 20th annual Governor's Pollution Prevention Awards were presented during a luncheon hosted by Illinois Waste Management and Research Center (WMRC), a division of IDNR. Applicants for the awards were judged in a statewide competition on criteria including technological innovation, environmental significance, economic benefits and commitment to pollution prevention.

The 2006 award winners are listed below.

Pollution Prevention Award (first time winners)

Small company

Chem Processing, Inc. (CPI), Rockford, is a comprehensive metal finisher. CPI added a reverse osmosis wastewater stream to the water softening system, and segregated the phosphating process wastewater. Due to these projects, CPI will save 900,000 gallons of water and 9000 square feet of hazardous sludge every year. Together, these projects will save CPI $5,300 a year.

PortionPac Chemical Corporation, Chicago, manufactures products to the industrial cleaning market. PortionPac modified chemical formulations were to reduce harmful materials resulting in a reduction of air and water pollution. Modifications also were made to packaging and a management program for developing sustainability was implemented.

Spraylat Corporation, Chicago, is a manufacturer of specialty coatings. Spraylat implemented programs that saved over $58,000 and reduced emissions by an estimated five tons per year. Production waste generation was reduced nearly 50% per unit of production.

Consolidated Printing Co., Chicago, was one of the first Illinois Great Printers, a designation awarded for its efforts to reduce wastes. Some of Consolidated's recent improvements include: switching to chemical free plate making; switching to zero VOC paints and varnishes and solvent-free vegetable oil based inks; using linseed oil press blanket washers; and eliminating the use of silver.

Large company

Farmland Foods, Inc., Monmouth—In 2005, Farmland Foods switched the coolant used to cool facility air compressors from water to ethylene glycol. This project helped reduce water demand on the water treatment facility and has reduced facility wastewater effluent by approximately 86,000 gal per day. The combined water/wastewater cost reduction saved Farmland Foods $60,112 per year.

Illinois Department of Military Affairs, Springfield, directs and provides support services to the Illinois National Guard. DMA's Environmental Branch has done P2 assessments at several National Guard facilities and has implemented a pollution prevention program and an Environmental Management System. DMA has installed aqueous parts washers with ultra filtration membrane systems, and has developed and installed an automated weapon cleaning system that uses ultrasonic cleaning combined with aqueous cleaners and ultrafiltration to extend the life of the cleaners.

CITGO, Lemont, implemented a flaring reduction project, which was intended to eliminate sources to the flare system. The company also replaced burners on three of its largest process heaters, resulting in an 80% reduction in

Upcoming Events

Brownfields 2006, Nov. 13-15, 2006

Grownd water Flow Model Workshop for Middle School-High School Teachers, Nov. 14 - 16, 2006

Farming Our Fuel: Growing a Sustainable Ethanol Industry, Nov. 15, 2006

Ohio Compost Association 2006 Annual Conference & Meeting, Nov. 17, 2006

Alternative Energy Developments in Illinois, Indiana, and Wisconsin, Nov. 17, 2006

2nd Annual Conferenc on Trade and Investment in the Americas "The Great Lakes Water Basin: Internatinal Law and Policy Crossroads", Dec 1-2, 2006

International Conference on Nanotechnology Occupational and Environmental Health and Safety, Dec. 4-7, 2006

2006 Mercury Control Technology Conference, Dec. 11-13, 2006

For more information on these upcoming events visit http://www.glrppr.org/calendar/

certain emissions and undertook leak detection and repair project, which reduced estimated annual VOC emissions by 100 tons. CITGO reduced the amount of benzene in its wastewater by over 75% through an improved in-line sampling plan, source elimination, process improvements, and operator training.

Vendor/Supplier

Finishes Unlimited Inc., Sugar Grove, is an employee owned industrial paint manufacturer. The company develops and manufactures EPA compliant water reducible bake enamel and air-dry coatings, which it supplies to industrial users. In 2005, Finishes Unlimited, Inc. converted three Illinois companies to water reducible VOC compliant coatings. These companies reduced their VOC emissions by 70%, or 27.87 tons, and HAPs emissions by 100%, or 9.7 tons. These companies also realized paint and disposal cost savings of over $200,000 per year.

Educational Organization

Pontiac Township High School, Pontiac, implemented a Crayon Recycling Program operated by students. The PTHS Ecology students develop receptacles made out of reused decorated five gallon buckets and helped fifth graders teach other students in their schools about the crayon recycling project. The ecology class also has operated a community storm water pollution education program where they stenciled messages on each of the city's storm drains, distributed fliers, and submitted articles to local newspapers to educate the community about storm water pollution.

Continuous Improvement

Small company

Lansing Cleaners, Lansing, in 2005 replaced its last remaining Perc machine with a dry cleaning machine using an environmentally friendly solvent. This machine eliminated the use of a highly regulated chlorine based solvent, and lowered energy costs. Lansing also has installed LED lighting systems that are 90+ efficient, which has lowered its electrical consumption, and installed instantaneous hot water systems to eliminate the typical hot water tank system. Finally, Lansing increased its fleet of natural gas powered trucks.

R.B. White, Inc., Bloomington, is a sheet metal fabrication facility. The company has switched to a state-of-the-art powder coating system, which has prevented a total of 225 tons of potential Volatile Organic Company (VOC) emissions. The powder coating conversion also: reduced worker exposure to harmful solvents; improved transfer efficiency, recovery, and reuse of overspray; and provided superior finish with greater durability and improved corrosion resistance. Another benefit of the powder coating system is reduced energy usage.

Large company

GE Healthcare, Arlington Heights, is a manufacturer of radiopharmaceuticals. GE Healthcare implemented energy conservation, water conservation, and waste reduction projects. By ramping down power to manufacturing equipment during idle times, an estimated total of 938,054 Kilowatt-hours a year will be conserved. The use of polystyrene packaging material was discontinued in favor of an air filled recyclable material. This freed up an estimated 18,000 cubic feet of sanitary landfill space and saved GE Healthcare customers an estimated $13,000 per year.

Abbott, Abbott Park, is a health care company that manufactures and markets medical products. The company eliminated the use of methanol in an antibiotic manufacturing process. This resulted in a 95% reduction of HAP emissions, the elimination of wastewater generation, and a saving of $108,000. The company also fixed compressed air leaks throughout the facility, replaced disposable apparel with reusable clothing, and reduced the frequency of a purified water flush resulted in a reduction of 353,600 gallons of water.

ITT Bell & Gossett, Morton Grove, switched from a solvent-based paint to a waterborne paint. It is estimated that this change will save Bell & Gossett $160,000 a year and reduce its potential air emissions by over 60%. By eliminating the used paint waste solvent, paint filters and associated waste are now sent to a landfill, eliminating the need for specialized waste disposal and making a safer environment for employees.

Gates Corporation, Galesburg, mixes slab rubber stock for five other Gates hose manufacturing facilities. It implemented projects that reduced waste to the landfill, improved raw material usage, and lowered maintenance costs. Improved controls and automating in the cooling tower have saved an estimated three million gallons of water per year.

Nestle' USA, Jacksonville, manufactures and packages Coffee-mate®. Environmental projects in 2005 include a project to conserve water and reduce effluent, variable Frequency Drive (VFD) units were installed on two cooling towers and an air compressor to control motor speed and reduce energy use. Other projects included raising the chilled water temperature during plant shut down for energy conservation and reusing tank car condensate in the boiler.

Caterpillar-Mossville Engine Center, Mossville, has changed to a greener packaging technology, with a focus on increasing profitability and social responsibility. The company worked with suppliers to eliminate waste associated with cardboard, plastic and plywood packaging. These changes range from switching to re-usable plastic tubs from cardboard and metal tubs, to the entire re-design of a gear tray that allows ergonomic assembly and recycling of the plastic tray. Total savings for 2005 equaled $1.7 million, while total waste volume reduction equaled nearly 1.2 million pounds.

Cardinal Health, McGaw Park, provides health care products and services. The company implemented projects that reduced over 3.328 million pounds of packaging materials annually with an additional 554,000 lbs of waste reduction identified in pending projects. Projected cost savings are $4.7 million annually and a potential for additional savings that could total to $1.4 million with on going projects.

Continental Tire North America (CTNA), Mount Vernon, manufactures radial tires. CTNA decreased the volume of its byproducts sent to landfill by 7.3 million pounds in 2005. CTNA now recycles 71% of all of the waste and by-products that are generated at the plant. CTNA also conserves resources through re-processing a variety of rubber components. Other project resulted in plant lighting being modified to reduce energy usage by 50%, natural gas consumption was reduced by 3.5%, and water usage was reduced by 5%.

Harris Corporation's Broadcast Communication Division (BCD), Quincy, manufactures radio and television transmitters. BCD's pollution prevention projects included designing a closed loop water system to eliminate cooling water discharges, recovering process heat for use to pre-heat incoming city water, reducing the toxicity of materials used in the manufacturing process, replacing a traditional parts washer with a virtually waste-free unit, and updating lighting.

International Truck & Engine Corporation, Melrose Park, produces diesel engines for midsized trucks and school buses. In 2005, the company modified its engine testing system to recover and reuse the fuel flushed out of its test engines. Because of this process change, International reused 35,510 gallons of fuel, resulting in an annual savings of $168,170 in waste disposal costs. Last year, International also saved more than $500,000 through its Reduce, Reuse, and Recycle efforts.

Service Organization

St. Joseph's Hospital, Breese, has over the past decade been preparing medical imaging processes for transition from film to digital viewing. This eliminates the need for costly film and decreases use of valuable natural resources such as silver. St. Joseph's also implemented projects to recycle corrugated cardboard, recycle "junk mail" and desk paper, and reduce medical waste through acquisition of a special washer for surgical suction canister content disposal. The hospital donates used or outdated medical equipment to mission programs rather than placing it into the waste stream.

Sarah Bush Lincoln Health System (SBLHS), Charleston/Mattoon, worked with local and state officials, as well as employees to identify ways steps needed to establish long-term and sustainable pollution prevention efforts. SBLHS conducted a building energy audit and waste audit, installed upgraded lighting bulbs and fixtures, and recycled cardboard. SBLHS is exploring utilizing vermicomposting to eliminate food waste.

Innovate Illinois Award

The Innovate Illinois Award was presented to Caterpillar's Mossville Engine Center for its Advanced Combustion Emissions Reduction Technology (ACERT). ACERT recovers exhaust energy through series turbo charging and uses the energy to manage airflow into the combustion chamber with an electronically controlled variable intake valve. This optimization translates into air pollution prevention, energy resource conservation, and a cost savings for every ACERT engine customer in Illinois and throughout the world.

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Fine Print

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Bob Iverson, GLRPPR Executive Director, One Hazelwood Dr., Champaign, IL 61820, 217-333-5793, 217-333-8944 (fax), biverson@wmrc.uiuc.edu

Wayne Duke, LINK Designer & Editor, One Hazelwood Dr., Champaign, IL 61820, 217-333-5793, 217-333-8944 (fax), wduke@wmrc.uiuc.edu